

1. All-weather road - A term used frequently in mapping to indicate a road which is passable throughout the year with no appreciable loss in capacity: "All-seasons" is considered to be more definitive where this type of classification is desired, since weather conditions such as cloudbursts, flooding, and snow blockage can completely close roads for varying periods. The preferred method of classifying roads, however, is by surface type, which is related directly to capacity.
2. Limited all-weather road - Same as all-weather road except that capacity is reduced considerably during bad weather.
3. Fair-weather road - A term used frequently for mapping to indicate a road which quickly becomes impassable in bad weather and which cannot be kept open by normal maintenance. Since impassability is more closely related to season than to weather, the term "seasonal road" provides a better description. Classification by surface type is preferred, however, since this is related directly to capacity.

DIA review(s) completed.

Requirement 2. Route Capacities
(Reference: Section II.C. of Terms of Reference)

1. Provide present dry and wet season route capacities for North Vietnam and Laos as follows:
 - a. Routes 1A and 15 south of the Thanh Hoa area.
 - b. All routes between Vinh or the coast and the Tan Ap area on route 15.
 - c. All connections between routes 15 and 101 and the routes in Laos.
 - d. Laotian routes 12, 23, 911, 9, 92, 921, 922, 923, 96, 165, and routes south of 165.
 - e. Any other routes considered to be significant in supplying Laos or South Vietnam.
2. What effect did the US/GVN air strikes have on routes capacities in North Vietnam during 1965? What effect have the recent interdiction efforts had on route capacities in Laos? What is the present throughput capacity of the Laotian supply route, taking recent interdiction efforts into account?
3. What effect will present construction activities have on route capacities in North Vietnam and Laos during 1966? What will be the probable throughput capacity of the Laotian supply route at the end of 1966,

assuming the same level of US/GVN interdiction as in 1965? How much of this route will be all-weather?

4. Provide an estimate of the present theoretical capacity of the sea route from North Vietnam, taking into consideration current Market Time operations.

5. Provide present dry and wet season capacities of the roads in Cambodia that approach the border of South Vietnam. How much tonnage could be moved over these routes without active, overt Cambodian cooperation?

Deadline to CIA: 28 January 1966

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Requirement 2. Route Capacities

NORTH VIETNAM

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
1A	Than Hoa - Rt. 7A	3800	1100	1350	250	}	**	* Significant improvements to main coastal Route 1A are not expected. Development of an interior alternate north-south artery is probably underway to alleviate present reliance on Rt. 1A.
	7A Jct - Vinh	1200	250	1200	250			
	Vinh - Ha Tinh	850	100	850	100			
	Ha Tinh - SVN Bdr	750	100	850	100			
15	Bai Thuong - Nghia Hung	550	100	500	100	750	150	** Major portions of Route 15 will probably be integrated into the alternate inland north-south artery.
	Nghia Hung - Rt. 7A	550	100	550	100	750	150	
	7 Jct - Vinh	750	150	750	150	750	150	
	Vinh - Xom Con Cau	450	100	450	100	750	150	
	(via Rt. 8 to Dia Loi)							
	Dia Loi - Xom Con Cau	800	150	600	100	600	100	
	Xom Con Cau - Mu Gia Pass	600	100	450	100	600	100	
7	Rt. 1A - Vat Giav	1050	200	900	200	900	200	
	Vat Giav - Cua Rao	700	150	700	150	700	150	
	Cua Rao - Laos Bdr	600	100	450	100	500	150	
8	Linh Cam - Rao Qua	1100	350	700	150	700	150	
	Rao Qua - Keonua Pass	450	100	400	100	500	150	
* See AP-1-335-4-1-65 INT								

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Requirement 2. Route Capacities

NORTH VIETNAM

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
75	Ke Mung - Ban Na Khom			50	0	300	100	Portions of route (central portion) undefined.
76	Ban Na Khom - LV Bord			50	0			Central portion undefined. Intended development undiscernable.
152	Ha Tinh - Dia Loi	800	150	800	150	800	150	
102	Rt. 101 - Laos Bdr	300	0	150	150	300	150	
103	Rt. 101 - Xom Bang	550	100	550	100	550	100	
	Xom Bang - Rt. 102	50	0	150	0	300	100	
116	Rt. 15 - Ban Co Ba	700	150	400	0	600	100	
	Ban Co Ba - Ban Chieng	600	100	600	100	600	100	
118	Rt. 1 - Bai Thuong	750	250	750	250	750	250	
	Bai Thuong - Muong Piet	400	0	400	0	400	0	
127	Rt. 15 - Laos Bdr	600	100	600	100	600	100	Maintained in 1965 as the main supply route to Laos border and Jct Rt. 65, Laos, in effort to keep PAVN/PL troops in Sam Nena area resupplied.
* See	AP-1-335-4-1-65 INT							

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Requirement 2. Route Capacities

NORTH VIETNAM

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
153	Jct Rt. 8 - Laos Bdr	Trail	Trail	Trail	Trail			5-mile track west of Jct Rt. 15 under improvement in late 1965 and January 1966. Surface width 16-18 ft., improved earth. Remainder of route is only a 6 ft. track deteriorating to a trail 5 mi. east of Laos border.
154	Rt. 15 - Laos Bdr	50	0	50	0			
193		300	0	50	0			
196		50	0	50	0	300	100	Possibly motorable, connecting waterway at Lang Mo and Laos border. Probable future connection with Laos Rt. 911.
702		---	---	---	---	---	---	Trail/track only. Development into motor route expected but extent unknown.
* See	AP-1-335-4-1-65 INT							

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Requirement 2. (Con't)

LAOS

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
9	SVN Bdr - Song Cua Lo Riv	800	150	400	0			a. SVN - Ban Dong; 14 mi.; seasonal not used for thru traffic; poor condition.
				600	100			b. Ban Dong - Song Cua Lo Riv; 13 mi.; limited all-season; fair condition.
	Song Cua Lo Riv - Rt. 23	550	50	550	50	750	150	When gravel surface is improved to fair condition.
12	SVN Bdr - Rt. 8	600	100	450	100			Gravel surface deteriorated to improved earth.
23	Rt. 12 - Rt. 9	400	0	500	100			a. Rt. 12 - Rt. 11; 16 mi.; limited all-season, improved earth and log-corduroyed surface; fair condition.
				306	0			b. Seasonal; no thru traffic reported during the 1965 rainy season.
	Rt. 9 - Se'Bang Hieng Riv	150	0	150	0			
	Se'Bang Hieng Riv - Jct Rt. 16	400	0	400	0			
	Jct Rt. 16 - Ban Thateng	700	150	700	150			
	Ban Thateng - Jct Rt. 232	700	150	700	150			
	Jct Rt. 232 - Rt. 13	3800	1100	3800	1100			
92	SVN Bdr - Song Ben Ha Riv	150	50	150	50			
	Song Ben Ha Riv - Rt. 9	50	0	150	50			<u>New Alinement</u> joins Rt. 9 Vic Sepone.
	Rt. 9 - Jct 921	500	100	400	100			Leaves Rt. 9 Vic. Bang Dong; limited all-season.
	Jct 921 - Jct 922	500	100	400	100			Limited all season.
	Jct 922 - Jct 162	400	100	150	50	400	100	a. Rt. 922 - Rt. 923; under repair in January 1966.
				90	0			b. Rt. 923 - Rt. 162 appears abandoned; traffic thru Rt. 96.

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Requirement 2. (Con't)

LAOS

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
96	Rt. 923 - Rt. 165 Rt. 165 - Rt. 16 - CA/LA border			Est. 200 Est. 50	Est. 50 Est. 0	400 400	100 100	Under construction as of January 1966. Under improvement, possibly jeepable as of January 1966.
165	Rt. 16 - SVN Bdr	50	0	100 200	0 50	400 400	100 100	a. Rt. 16 - Rt. 96, poor condition, seasonal. b. Rt. 96 - SVN; fair condition, seasonal.
911	Rt. 23 - Rt. 91			Est. 200	Est. 100	500	100	Rt. under construction and improvement January 1966; limited all season; alternate to Rt. 23.
921	Rt. 92 - SVN Bdr	200	50	50	0			Traffic possibly proceeding via Rt. 922; deteriorated to 6-8 ft. track.
922	Rt. 92 - SVN Bdr	100	0	200	50			Limited all-season; surface improved by log-corduroy method.
923	Rt. 92 - Ban Tampril	50	0	400 50	100 0			a. Rt. 92 - Rt. 96; 4 mi.; improved in conjunction with Rt. 96. b. Rt. 96 - Ban Tampril; jeepable track.
16	Jct Rt. 23 - Attapev Attapev - Muong Cao Muong Cao - SVN Bdr	400 500 50	0 0 0	400 500 50	0 0 0			Jeepable track.
167	Rt. 16 - Attapev Old (YB 0052)-(YB 0837) Attapev Old - YB 1945 YB 1945 - Jct Rt. 16 (YB 4431)			450 650 50	0 0 0			Bypass of the Attapev Conclave; 11 mi. Improved earth in poor condition; 7 mi. Jeepable track; 12 mi.

* See

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Requirement 2. (Con't)

CAMBODIA

Highway Route Number	Highway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry Season	Wet Season	Dry Season	Wet Season	Dry Season	Wet Season	
1	Phnom Penh to S.V. border			3600	1550	No change		The controlling section extends from Snoul to S.V. border; from Snoul to Laos border, cap. is 3650/1570.
7	Skoun to Snoul			3650	1550	"	"	
78	Phumkrek to S.V. border			900	100	"	"	
13	Laos border to S.V. border			900	300	"	"	
19	Jct Rt. 13 vic. Stung Treng to S.V. border			700	250	"	"	

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Requirement 2. (Con't)

NORTH VIETNAM

Waterway Route Number	Waterway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		*Dry Season	*Wet Season	*Dry Season	*Wet Season	*Dry Season	*Wet Season	
Song Chu	Mouth of Song Chu - Bai Thuong Bai Thuong - Sammuea, Laos	25 0	50 25	25 0	50 25			
Song Ca	Benthuy - Tuong Que	2000	S.T.P.D.	2000	S.T.P.D.			
	Tuong Que - Tri Le	250	S.T.P.D.	250	S.T.P.D.			
	Tri Le - Cau Rao	Perennially 0	50	Perennially 0	50			
Song Ngan	Sau Song Ca Riv - Houng Khe	25	2000	25	2000			
	Houng Khe - Bai DVC Thon	25	S.T.P.D. Perennially					
Kien Giang	Tonkin Gulf - Than Ha	1000	2500	1000	2500			
	Than Ha - Luat Son	25	50	25	50			
Ben Xe	Confluence of Ben Hai Riv - Ben Quang	50	S.T.P.D. Perennially					
Song Ben Hai/Rao Thanh	Mouth of Song Ben Hai-Ban Tham	1000	2000	1000	2000			
	Ban Tham - Bo Ho So	50	150	50	150			

* Dry season denotes low water
 * Wet season denotes high water

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Requirement 2. (Con't)

LAOS

Waterway Route Number	Waterway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry *	Wet *	Dry *	Wet *	Dry *	Wet *	
		Season	Season	Season	Season	Season	Season	
Se Bang Fai	Mekong Riv - Bang Dang	50	500	50	500			
	Bang Dang - to Rt. 23 Channel Overpass	25	50	25	50			
Se Bang Hleng	Mekong Riv - Ban Nathon	50	500	50	500			
	Ban Nathon - SVN Bdr	50	S.T.P.D. Perennially					
Se Pone	Confluence with Se Bang Hleng - SVN Bdr	50	500	50	500			
Se Kong	Cambodia - Waterfall N.E. of Ban Phone	25	250	25	250			
	Waterfall - An Ling	25	50	25	50			

* Dry season denotes low water
Wet season denotes high water

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Requirement 2. (Con't)

CAMBODIA

Waterway Route Number	Waterway Route Segment	*April 1965 Max. Cap.		Present Max. Cap.		Projected Dec 66 Max. Cap.		Remarks
		Dry * Season	Wet* Season	Dry* Season	Wet * Season	Dry * Season	Wet * Season	
Srepok (Ea Krong)	Stung Treng RVN border	25STPD	50STPD	25STPD	50STPD	25STPD	50STPD	
Ea Hleo/ IA Meur	Srepok to RVN border	---	25STPD	---	25STPD	---	25STPD	
Ya Drang	Srepok to RVN border	25STPD	50STPD	25STPD	50STPD	25STPD	50STPD	
Se San	Srepok to RVN border	---	25STPD	---	25STPD	---	25STPD	
Se Kong	Stung Treng to Laotian border	25STPD	250STPD	25STPD	250STPD	25STPD	250STPD	

* Dry season denotes low water
Wet season denotes high water

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